

27. The oligonucleotide of claim 26 wherein said two nucleotides are joined together by a 2'-5' phosphodiester linkage, a 3'-methylenephosphonate linkage, a Sp phosphorothioate linkage or a methylene(methylimino) linkage.

28. The oligonucleotide of claim 23 wherein said at least two nucleotides joined together and positioned at said 3' terminus comprise nucleotides joined together by a 2'-5' phosphodiester linkage, a 3'-methylenephosphonate linkage, a Sp phosphorothioate linkage, a methylene(methylimino) linkage, a dimethylhydrazino linkage, a 3'-deoxy-3'-amino phosphoroamidate linkage, an amide 3 linkage or an amide 4 linkage; and

wherein said at least two nucleotides joined together and positioned at said 5' terminus comprise nucleotides joined together by a 2'-5' phosphodiester linkage, a 3'-methylenephosphonate linkage, a Sp phosphorothioate linkage, a methylene(methylimino) linkage, a dimethylhydrazino linkage, a 3'-deoxy-3'-amino phosphoroamidate linkage, an amide 3 linkage or an amide 4 linkage.

29. The oligonucleotide of claim 28 wherein said two nucleotides joined together at said 3' terminus and said two nucleotides joined together at said 5' terminus are, independently, joined together by 2'-5' phosphodiester linkages, 3'-methylenephosphonate linkages, Sp phosphorothioate linkages or methylene(methylimino) linkages.

30. The oligonucleotide of claim 21 wherein at least one of said two nucleotides joined together is a 2'-alkylamino substituted nucleotide.

31. The oligonucleotide of claim 22 wherein at least one of said two nucleotides joined together is a 2'-alkylamino substituted nucleotide.

32. The oligonucleotide of claim 23 wherein at least one of said two nucleotides joined together at said 3' terminus is a 2'-alkylamino substituted nucleotide, and

wherein at least one of said two nucleotides joined together at said 5' terminus is a 2'-alkylamino substituted nucleotide.

33. An oligonucleotide comprising a plurality of linked nucleotides, wherein:
at least one of said nucleotides has a C3' endo type pucker; and
at least two of said plurality of nucleotides are joined together in a continuous sequence and have a C2' endo type pucker or an O4' endo type pucker, provided that said nucleotides are not 2'-deoxy-erythro-pentofuranosyl nucleotides.

34. The oligonucleotide of claim 33 wherein said nucleotides having said C3' endo type pucker are joined together in a continuous sequence that is positioned 3' to said continuous sequence of nucleotides having said C2' endo type pucker or O4' endo type pucker.

35. The oligonucleotide of claim 33 wherein said nucleotides having said C3' endo type pucker are joined together in a continuous sequence that is positioned 5' to said continuous sequence of nucleotides having said C2' endo type pucker or O4' endo type pucker.

36. The oligonucleotide of claim 33 wherein at least two of said nucleotides having said C3' endo type pucker are joined together in a continuous sequence that is positioned 3' to said continuous sequence of said nucleotides having said C2' endo type pucker or O4' endo type pucker; and

at least two of said nucleotides having said C3' endo type pucker are joined together in a continuous sequence that is positioned 5' to said continuous sequence of said nucleotides having said C2' endo type pucker or O4' endo type pucker.